

REMARKS

INTRODUCTION:

In accordance with the foregoing, claims 17, 18, and 27-31 have been canceled, and claims 1, 11, 12, 16, 19, 32 and 33 have been amended. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-16, 19-26, and 32-35 are pending and under consideration. Reconsideration is respectfully requested.

CLAIM OBJECTIONS:

A. Claim 17 was objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Claim 17 has been cancelled, so the objection is moot.

B. Claim 18 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Claim 18 has been cancelled, so the objection is moot.

C. Claim 28 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Claim 28 has been cancelled, so the objection is moot.

D. Claim 29 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Claim 29 has been cancelled, so the objection is moot.

E. Claim 30 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Claim 30 has been cancelled, so the objection is moot.

REJECTION UNDER 35 U.S.C. §112:

A. In the Office Action, at page 3, claims 12-16, 18 and 33-35 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner submitted that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The

Examiner submitted that claims 12 and 33 recite "wherein the mixed organic solvent includes less than 50% by weight of the weak polar solvent", which is not supported by the specification as filed.

This rejection is traversed and reconsideration is requested.

It is respectfully submitted, as was discussed with the Examiner in the interview on July 7, 2004, that the above recitation refers to the Examples listed in Table 1 on pages 10-11 of the specification of the present invention. For example, Examples 2, 3, 4, and 5 each have about 40% by volume of the weak polar solvent, the about 40% by volume representing less than 40% by weight of the weak polar solvent, wherein the weak polar solvent is a main solvent with respect to volume. To refresh the Examiner's memory, as was discussed in the Examiner interview, the following type of computations were calculated in which the specific gravities of the constituents were used to convert volume ratios to weight information. Thus, for Example 2, the weak polar solvent represents 32% by weight:

dimethoxyethane (weak polar solvent)	2(0.8417) =	1.6834 = 32% by weight
sulfolane	2(1.261)=	2.522
1,3-dioxolane	1(1.065)=	1.065
TOTAL.....		5.2704

Similarly, Examples 3, 4, and 5 comprise approximately 32% by weight of the weak polar solvent.

It is respectfully submitted that the courts have held that it is not necessary that the application describe the claim limitations exactly, but only so clearly that persons of ordinary skill in the art will recognize from the disclosure that appellants invented processes including those limitations. In re Wertheim, 191 USPQ 90, 96 (CCPA 1976). As a general matter, the requirements of 35 U.S.C. §112, first paragraph, are that the written description demonstrate to one of ordinary skill in the art that the inventor is in possession of the invention itself. MPEP 2163.02. It is clear that the mixed organic solvent includes less than 50% by weight of the weak polar solvent in Examples 2, 3, 4, and 5 and about 40% by volume in said Examples, wherein the weak polar solvent is a main solvent with respect to volume.

Thus, limiting the claimed invention to include about 40% by volume of the weak polar solvent, the about 40% by volume representing less than 40% by weight of the weak polar

solvent, wherein the weak polar solvent is a main solvent with respect to volume, which is a limiting expression similar to a negative expression with respect to an amount of the weak polar solvent, is submitted to be descriptive and to be permitted since the court, in Ex Parte Williams and Neal, 39 USPQ 125 (1938) at pages 126-127, held that a negative expression in a chemical claim, while expressed in terms not found in the original disclosure is not objectionable as eliminating from scope certain materials which may possibly have been included in the original disclosure since the limitation has a narrowing effect rather than a broadening one.

Thus, it is respectfully submitted that independent claims 12 and 33 are allowable under 35 U.S.C. §112, first paragraph. Since independent claim 1 is allowable under 35 U.S.C. §112, first paragraph, and claim 11 depends therefrom and sets forth a clear limitation of claim 1, claim 11 is submitted to be allowable under 35 U.S.C. §112, first paragraph. Since claims 13-16 and 18 depend from independent claim 12 and set forth clear limitations thereof, claims 13-16 and 18 are submitted to be allowable under 35 U.S.C. §112, first paragraph. Since independent claim 33 is allowable under 35 U.S.C. §112, first paragraph, and claims 34-35 depend therefrom and set forth clear limitations of claim 33, claims 34-35 are submitted to be allowable under 35 U.S.C. §112, first paragraph.

B. In the Office Action, at pages 4-5, claims 11, 16, and 27-35 were rejected under 35 U.S.C. §112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 11 and 16 have been amended as suggested by the Examiner.

Claims 27-31 have been cancelled.

Claim 32 has been amended to correct antecedent basis.

Claim 33 has been amended as suggested by the Examiner.

Thus, claims 11, 16, 32 and 33 are now submitted to be in form for allowance under 35 U.S.C. §112, second paragraph.

REJECTION UNDER 35 U.S.C. §102:

A. In the Office Action, at pages 5-7, claims 1-33 were rejected under 35 U.S.C. §102(e) as being anticipated by Chu et al., USPN 6,030,720. This rejection is traversed and reconsideration is requested.

Independent claims 1, 12, 19, and 33 have been amended to recite: "wherein the mixed organic solvent includes about 40% by volume of the weak polar solvent, the about 40% by volume representing less than 40% by weight of the weak polar solvent, wherein the weak polar solvent is a main solvent with respect to volume," which is supported by Examples 2-5 in Table 1 (see above). Since Chu et al. teaches about using about 50-100% of the main solvent (col. 14, lines 43-49), which includes values slightly below 50%, as indicated by the Examiner, and more preferably, between 70 and 90% by weight main solvent, it is respectfully submitted that amended claims 1, 12, 19 and 33 of the present invention are different from the invention of Chu et al., and are not anticipated under 35 U.S.C. §102(e) by Chu et al., USPN 6,030,720.

Thus, since claims 2-11 and 17 depend from amended claim 1, claims 13-16 depend from amended claim 12, claims 20-26 and 32 depend from amended claim 19, and claims 34-35 depend from amended claim 33, claims 2-11, 17, 13-16, 20-26, 32, and 34-35 are not anticipated under 35 U.S.C. §102(e) by Chu et al., USPN 6,030,720 for at least the reasons that claims 1, 12, 19 and 33 are not anticipated under 35 U.S.C. §102(e) by Chu et al., USPN 6,030,720.

B. In the Office Action, at pages 5-7, claims 1-33 were rejected under 35 U.S.C. §102(e) as being anticipated by Nimon et al., USPN 6,225,002. This rejection is traversed and reconsideration is requested.

As may be seen in Table 1, pages 10-11 of the specification of the present invention, the weak polar solvent represents 40% by volume of the solvent mixture and is a main solvent thereof. In contrast, Nimon et al. recites, col. 6, lines 46-48: "the liquid electrolyte solvent mixtures of this invention include about 50 to 95% by volume of the main solvent." Hence, the amendment of independent claims 1, 12, 19 and 33 to recite "wherein the mixed organic solvent includes about 40% by volume, of the weak polar solvent, the about 40% by volume representing less than 40% by weight of the weak polar solvent" is submitted to distinguish the independent claims 1, 12, 19 and 33 over Nimon et al.

Hence, claims 1, 12, 19, and 33 are submitted not to be anticipated under 35 U.S.C. §102(e) by Nimon et al., USPN 6,225,002 (which incorporates Chu et al., USPN 6,030,720, by reference). Since claims 2-11 and 17 depend from amended claim 1, claims 13-16 depend from amended claim 12, claims 20-26 and 32 depend from amended claim 19, and claims 34-35 depend from amended claim 33, claims 2-11, 17, 13-16, 20-26, 32, and 34-35 are not anticipated under 35 U.S.C. §102(e) by Nimon et al. for at least the reasons that claims 1, 12, 19 and 33 are submitted not to be anticipated under 35 U.S.C. §102(e) by Nimon et al., USPN 6,225,002.

C. In the Office Action, at pages 5-7, claims 1-33 were rejected under 35 U.S.C. §102(e) as being anticipated by Katz et al., USPN 6,358,643. This rejection is traversed and reconsideration is requested.

Independent claims 1, 12, 19, and 33 have been amended to recite: "wherein the mixed organic solvent includes about 40% by volume of the weak polar solvent, the about 40% by volume representing less than 40% by weight of the weak polar solvent," which is supported by Examples 2-5 in Table 1 (see above). Since Katz et al. teaches about using about 50-100% of the main solvent (col. 12, lines 4-11): "In general, the liquid electrolyte solvents of this invention include about 50 to 100% by weight of the main solvent (excluding salts) which is usually one or more and such as the above-described ethanediether compounds. The balance will be one or more of the cosolvents listed above. More preferably, the electrolyte solvents include about 50 to 100% by weight main solvent, and most preferably between about 70 and 90% by weight main solvent," which includes values slightly below 50%, as interpreted by the Examiner, it is respectfully submitted that amended claims 1, 12, 19 and 33 of the present invention are different from the invention of Katz et al. (which incorporates Chu et al., USPN 6,030,720, by reference), and are not anticipated under 35 U.S.C. §102(e) by Katz et al., USPN 6,358,643.

Thus, since claims 2-11 and 17 depend from amended claim 1, claims 13-16 depend from amended claim 12, claims 20-26 and 32 depend from amended claim 19, and claims 34-35 depend from amended claim 33, claims 2-11, 17, 13-16, 20-26, 32, and 34-35 are not anticipated under 35 U.S.C. §102(e) by Katz et al., USPN 6,358,643 for at least the reasons that claims 1, 12, 19 and 33 are not anticipated under 35 U.S.C. §102(e) by Katz et al., USPN 6,358,643.

CONCLUSION:

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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